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Claims:

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1. Backflushable filtering apparatus for a molten material, particularly for a plastic melt, comprising a housing (1) in which a sieving arrangement (17) is provided which includes at least two sieving sections (16) separated from one another, to which the melt to be filtered is supplied via at least one distributor (3) which includes at least one control body (9) for backflushing, moveable within a housing (53) that is provided with an inlet opening (4) for the material to be filtered, said control body, in a filtering position, unblocking the influx of material to be filtered to all sieving sections (16) through connection channels (23), while in a backflushing position interrupting the influx of material to the filtering section (16) to be backflushed and interconnecting the connection channel (23) of the sieving section (16) flushed back with a discharge channel (28) located in the control body (9) and leading away from it, at least the majority of the circumference of the control body (9) being surrounded by a distribution space (7) for the material to be filtered which is situated within the housing (53) of the distributor (3), said distribution space (7) being connectable through the connection channels (23) to all sieving sections (16) in communication with the distributor (3), characterized in that guiding channels (6) lead from the inlet opening (4) to the regions of the two front ends (61, 62) of the distribution space (7), that said front ends (61, 62) are situated in the region of the outermost connection channels (23) or outside the region of all connection channels (23), and that the discharge channel (28) may be caused to communicate with the connection channel (23) of the respective sieving section (16) to be flushed back through a flush back channel (27) of at least one cross-piece (14) of the control body (9) which overbridges the distribution space (7).

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2. Apparatus according to claim 1, characterized in
– that the control body (9) is a slider (37) displaceable in the housing (53), that surrounds it, and
– that the connection channels (23) leading to the individual sieving sections (16) are offset relative to each other in sliding direction of the slider (37).

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3. Apparatus according to claim 1, characterized in that the control body (9) is a rotary piston (8), rotatable about its longitudinal axis (13) within its housing (53), which is supported in a sealed manner at its two front ends (10), (11) in its housing (53), but is surrounded in-between by the distribution space (7).

- 1 4. Apparatus according to any of claims 1 to 3, characterized in that the connection
channels (23) extend only in the housing (53), which surrounds the control body, and
that sieve nests (42) of the housing (1) of the filtering apparatus, which contain the
5 sieving sections (16), immediately join the outer surface of the housing (53) of the
control body (9) within the region of the respective orifice of a connection channel (23).
5. Apparatus according to any of claims 1 to 4, characterized in that the sieving
arrangements (17) are located in a sieve carrier (2) in common.
- 10 6. Apparatus according to any of claims 1 to 5, characterized in that the housing (1) of
the filtering apparatus (43) and the housing (53) of the control body (9) are united to
form a housing in common.
- 15 7. Apparatus according to any of claims 1 to 6, characterized in that the sieving
arrangement (17) comprises a plurality of sieving sections (16) arranged in at least
one array, the orientation of which being parallel to the longitudinal direction of the
distribution space (7).
- 20 8. Apparatus according to any of claims 1 to 7, characterized in that the sieve carrier (2)
may be moved relative to the housing (1) into a sieve exchange position.
9. Apparatus according to any of claims 1 to 8, characterized in
25 – that the control body (9) is elongated or is provided with an elongated elongation
(40), and
– that the discharge channel (28) extends in longitudinal direction of the control body
(9) or of the elongation (40) up to ambient or into a collection chamber for dirty
material.
- 30 10. Apparatus according to claim 9, characterized in that a throttle (36) is provided at the
discharge end of the discharge channel (28).
11. Apparatus according to any of claims 1 to 10, characterized in that at least one sieve
35 carrier (2) formed either as a piston or as a flat slider is provided, each sieve carrier
(2) carrying at least two sieving sections (16).
12. Apparatus according to claim 11, characterized in that each sieving section (16)

comprises a perforated support plate (20) and a perforated backflushing plate (21) and at least one sieving layer (22) in-between.

13. Apparatus according to claim 12, characterized in that at least one sieving section (16) is separated from the adjacent sieving section (16) by a partition (18) arranged upstream in filtering position, and a connection channel (23) leads to each one of the sieving sections (16) which, preferably, discharges centrally relative to the sieving section (16).

14. Apparatus according to claim 12 or 13, characterized in that the perforated support plate (20) and the perforated backflushing plate (21) are arcuate, the convex side being upstream in filtering position.

15. Apparatus according to any of claims 12 to 14, characterized in that the perforated support plate (20) is supported by at least one supporting body (32) against the sieve carrier.

16. Apparatus according to any of claims 1 to 15, characterized in that at least one sieving section (16) comprises a rectangular or square sieving surface, optionally with rounded corners.

17. Apparatus according to any of claims 1 to 16, characterized in that each cross-piece (14) of the control body (9) is formed by a knob-like salient (54) of the outer surface of the control body (9) which surrounds the flush back channel (27) connectable to the connection channel (23) and sealingly engages an area of the wall of the housing (53) of the control body (9).

18. Apparatus according to claim 17, characterized in that a plurality of salients (54), that overbridge the distribution space (7), are provided on the control body (9) offset relative to each other both in longitudinal direction of the control body (9) and in its circumferential direction, a flush back channel (27) being arranged in each salient (54).

19. Apparatus according to claim 18, characterized in that two flush back channels (27) adjacent to each other are surrounded in common by a salient (54).

20. Apparatus according to any of claims 1 to 19, characterised in that at least one

additional guiding channel (60) leads into the distribution space (7) between the two guiding channels (6) leading to the front ends (61, 62) of the distribution space (7).

21. Apparatus according to any of claims 1 to 20, characterised in that at least two control bodies (9) are provided within a common housing (53), each one of which is supplied via guiding channels (6) in the region of the front ends (61, 62) of its distribution space (7).

22. Distributor for a backflushable filtering apparatus, comprising a housing (53) and a control body (9) for backflushing moveable therein, to which the material to be filtered is supplied through an inlet opening (4) and which, in filtering position, unblocks the influx of this material to at least two connection channels (23) which may be interconnected to sieving section (16) of the filtering apparatus, whereas in a flush back position, the control body (9) interconnects one of these connection channels (23) with a discharge channel (28) situated in the control body (9), the inlet opening (4) communicating with a distribution space (7) arranged in the housing (53) and whose majority surrounds the control body (9), characterized in that the inlet opening (4) communicates with the distribution space (7) via two guiding channels (6) which discharge at its front ends (61, 62) into the distribution space (7) within the region of the outermost connection channels (23) or outside the region of all connection channels (23).

23. Distributor according to claim 22, characterized in that the control body (9) comprises at least one cross-piece (14) at its circumference which overbridges the distribution space (7) and surrounds a flush back channel (27) communicating with the discharge channel (28), said cross-piece sealingly engaging an area of the inner wall of the housing (53).

24. Distributor according to claim 22 or 23, characterized in that the control body (9) is a slider (37) displaceable in the housing (53) or is a rotary piston (8) rotatable in the housing (53), said rotary piston (8) comprising at least two cross-pieces (14) which are offset relative to each other both in axial direction and in circumferential direction of the rotary piston (8).

25. Distributor according to any of claims 22 to 24, characterised in that at least one additional guiding channel (60) leads into the distribution space (7) between the two guiding channels (6) leading to its two front ends (61, 62).

1 26. Distributor according to any of claims 22 to 25, characterised in that at least two
control bodies (9) are disposed within a common housing (53), wherein a distribution
space (7) is assigned to each one of these control bodies (9) which distribution space
5 is supplied in the region of its front ends (61, 62) via guiding channels (6).

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